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<110> Avalon Pharmaceuticals, Inc.

<120> Amplified Cancer Target Genes Useful in Diagnosis and Therapeutic Screening

<130> 689290-182

<150> 60/434,918

<151> 2002-12-20

<150> 60/463,577

<151> 2003-04-17

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aggttaaaga	ctcacagccc	atcgatttga	gtgcattgac	tggtgcactt	cacattttcc	300
agctgaatga	agatggcccc	agcagtgaag	atctggagga	agagacagaa	aacataattg	360
cagcaaatca	ctgggttcta	cctgcagctg	aattccatgg	gctttgggac	agcttggtat	420
acgatgtgga	agtcaaattc	catctcctcg	attatgtgat	gacaacttta	ctgttttcag	480
acaagaacgt	caacagcaac	ctcatcacct	ggaaccgggt	ggtgctgctc	cacggctcctc	540
ctggcactgg	aaaaacatcc	ctgtgtaaaag	cgttagccca	gaaattgaca	attagacttt	600
caagcaggta	ccgatatggc	caattaattg	aaataaacag	ccacagcctc	ttttctaagt	660
ggttttcgga	aagtggcaag	ctggtaacca	agatgtttca	gaagattcag	gatttgattg	720
atgataaaga	cgccctggtg	ttcgtgctga	ttgatgaggt	ggagagtctc	acagccgccc	780
gaaatgcctg	cagggcgggc	accgagccat	cagatgccat	ccgcgtgggc	aatgctgtct	840
tgacccaaat	tgatcagatt	aaaaggcatt	ccaatgttgt	gattctgacc	acttctaaca	900
tcaccgagaa	gatcgacgtg	gccttcgttg	acagggctga	catcaagcag	tacattgggc	960
cacctctctg	agcagccatc	ttcaaaatct	acctctcttg	tttgggaagaa	ctgatgaagt	1020
gtcagatcat	ataccctcgc	cagcagctgc	tgacctccg	agagctagag	atgattggct	1080
tcattgaaaa	caacgtgtca	aaattgagcc	ttcttttgaa	tgacatttca	aggaagagcg	1140
agggcctcag	cggccgggtc	ctgagaaaac	tcccctttct	ggctcatgcg	ctgtatgtcc	1200
aggcccccac	cgtcaccata	gaggggttcc	tccaggecct	gtctctggca	gtggacaagc	1260
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cttttcccat ggagaacaca caaccgaaaa gtgcagactc tgagtgttcc agggaaacac 1380
atgctggaca tcccttgtaa cccggtatgg gcgcccctgc attgctggga tgtttctgcc 1440
cacggttttg tttgtgcaat aacgttatca cttttctaata gaggattcac attaataataa 1500
tataaaataa ataggtcagt tactgggtctc tttctccgaa tgttatgttt tgottttatc 1560
tcacagtaaa ataaatataa ttaatggttt gcatgtgaaa ttcacttttg aaagaacatg 1620
ttaccttacc ttttgtttta gaagttttca agtattaaaa tattttttag aa 1672

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<210> 7
 <211> 432
 <212> PRT
 <213> Artificial

<220>
 <223> Putative Protein Derived from cDNA.

<400> 7

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Glu Ser Pro Thr Val His Val Glu Val His Gln Arg Gly Ser Ser Thr
20          25          30
Ala Lys Lys Glu Asp Ile Asn Leu Ser Val Arg Lys Leu Leu Asn Arg
35          40          45
His Asn Ile Val Phe Gly Asp Tyr Thr Trp Thr Glu Phe Asp Glu Pro
50          55          60
Phe Leu Thr Arg Asn Val Gln Ser Val Ser Ile Ile Asp Thr Glu Leu
65          70          75          80
Lys Val Lys Asp Ser Gln Pro Ile Asp Leu Ser Ala Cys Thr Val Ala
85          90          95
Leu His Ile Phe Gln Leu Asn Glu Asp Gly Pro Ser Ser Glu Asn Leu
100         105         110
Glu Glu Glu Thr Glu Asn Ile Ile Ala Ala Asn His Trp Val Leu Pro
115         120         125
Ala Ala Glu Phe His Gly Leu Trp Asp Ser Leu Val Tyr Asp Val Glu
130         135         140
Val Lys Ser His Leu Leu Asp Tyr Val Met Thr Thr Leu Leu Phe Ser
145         150         155         160
Asp Lys Asn Val Asn Ser Asn Leu Ile Thr Trp Asn Arg Val Val Leu
165         170         175
Leu His Gly Pro Pro Gly Thr Gly Lys Thr Ser Leu Cys Lys Ala Leu
180         185         190
Ala Gln Lys Leu Thr Ile Arg Leu Ser Ser Arg Tyr Arg Tyr Gly Gln
195         200         205
Leu Ile Glu Ile Asn Ser His Ser Leu Phe Ser Lys Trp Phe Ser Glu
210         215         220

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Ser Gly Lys Leu Val Thr Lys Met Phe Gln Lys Ile Gln Asp Leu Ile
 225 230 235 240
 Asp Asp Lys Asp Ala Leu Val Phe Val Leu Ile Asp Glu Val Glu Ser
 245 250 255
 Leu Thr Ala Ala Arg Asn Ala Cys Arg Ala Gly Thr Glu Pro Ser Asp
 260 265 270
 Ala Ile Arg Val Val Asn Ala Val Leu Thr Gln Ile Asp Gln Ile Lys
 275 280 285
 Arg His Ser Asn Val Val Ile Leu Thr Thr Ser Asn Ile Thr Glu Lys
 290 295 300
 Ile Asp Val Ala Phe Val Asp Arg Ala Asp Ile Lys Gln Tyr Ile Gly
 305 310 315 320
 Pro Pro Ser Ala Ala Ala Ile Phe Lys Ile Tyr Leu Ser Cys Leu Glu
 325 330 335
 Glu Leu Met Lys Cys Gln Ile Ile Tyr Pro Arg Gln Gln Leu Leu Thr
 340 345 350
 Leu Arg Glu Leu Glu Met Ile Gly Phe Ile Glu Asn Asn Val Ser Lys
 355 360 365
 Leu Ser Leu Leu Leu Asn Asp Ile Ser Arg Lys Ser Glu Gly Leu Ser
 370 375 380
 Gly Arg Val Leu Arg Lys Leu Pro Phe Leu Ala His Ala Leu Tyr Val
 385 390 395 400
 Gln Ala Pro Thr Val Thr Ile Glu Gly Phe Leu Gln Ala Leu Ser Leu
 405 410 415
 Ala Val Asp Lys Gln Phe Glu Glu Arg Lys Lys Leu Ala Ala Tyr Ile
 420 425 430

<210> 8
 <211> 552
 <212> PRT
 <213> Artificial

<220>
 <223> Putative Protein Derived from cDNA.

<400> 8
 Ser Cys Ala Ser Cys Pro Trp Arg Arg Arg Arg Arg Ala Arg Gly Gly
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 Gly Trp Glu Gln Leu Ala Pro Gly Arg Thr Leu Ala Ala Thr Ala Pro
 20 25 30
 Trp Pro Trp Leu Ala Ala Arg Ala Arg Cys Ala Glu Val Ala Glu Leu
 35 40 45
 Ala Gly Pro Arg Arg Lys Arg Gly Glu Ala Gly Pro Arg Gln Glu Val
 50 55 60

Ala Leu Pro Gly Pro Ser Ala Ser Gly Ser Gly Gly Gly Ala Pro Arg
 65 70 75 80
 Ala Ala Asp Ser Lys Leu Gly Arg Gly Pro Arg Ala Glu Ala Ala Ala
 85 90 95
 Val Ala Ala Thr Leu Gly Val Arg Trp Arg Arg Pro Arg Pro Gly Trp
 100 105 110
 Val Pro Thr Ala Leu Gly Gly Ala Met Asp Glu Ala Val Gly Asp Leu
 115 120 125
 Lys Gln Ala Leu Pro Cys Val Ala Glu Ser Pro Thr Val His Val Glu
 130 135 140
 Val His Gln Arg Gly Ser Ser Thr Ala Lys Lys Glu Asp Ile Asn Leu
 145 150 155 160
 Ser Val Arg Lys Leu Leu Asn Arg His Asn Ile Val Phe Gly Asp Tyr
 165 170 175
 Thr Trp Thr Glu Phe Asp Glu Pro Phe Leu Thr Arg Asn Val Gln Ser
 180 185 190
 Val Ser Ile Ile Asp Thr Glu Leu Lys Val Lys Asp Ser Gln Pro Ile
 195 200 205
 Asp Leu Ser Ala Cys Thr Val Ala Leu His Ile Phe Gln Leu Asn Glu
 210 215 220
 Asp Gly Pro Ser Ser Glu Asn Leu Glu Glu Glu Thr Glu Asn Ile Ile
 225 230 235 240
 Ala Ala Asn His Trp Val Leu Pro Ala Ala Glu Phe His Gly Leu Trp
 245 250 255
 Asp Ser Leu Val Tyr Asp Val Glu Val Lys Ser His Leu Leu Asp Tyr
 260 265 270
 Val Met Thr Thr Leu Leu Phe Ser Asp Lys Asn Val Asn Ser Asn Leu
 275 280 285
 Ile Thr Trp Asn Arg Val Val Leu Leu His Gly Pro Pro Gly Thr Gly
 290 295 300
 Lys Thr Ser Leu Cys Lys Ala Leu Ala Gln Lys Leu Thr Ile Arg Leu
 305 310 315 320
 Ser Ser Arg Tyr Arg Tyr Gly Gln Leu Ile Glu Ile Asn Ser His Ser
 325 330 335
 Leu Phe Ser Lys Trp Phe Ser Glu Ser Gly Lys Leu Val Thr Lys Met
 340 345 350
 Phe Gln Lys Ile Gln Asp Leu Ile Asp Asp Lys Asp Ala Leu Val Phe
 355 360 365
 Val Leu Ile Asp Glu Val Glu Ser Leu Thr Ala Ala Arg Asn Ala Cys

370 375 380
 Arg Ala Gly Thr Glu Pro Ser Asp Ala Ile Arg Val Val Asn Ala Val
 385 390 395 400
 Leu Thr Gln Ile Asp Gln Ile Lys Arg His Ser Asn Val Val Ile Leu
 405 410 415
 Thr Thr Ser Asn Ile Thr Glu Lys Ile Asp Val Ala Phe Val Asp Arg
 420 425 430
 Ala Asp Ile Lys Gln Tyr Ile Gly Pro Pro Ser Ala Ala Ala Ile Phe
 435 440 445
 Lys Ile Tyr Leu Ser Cys Leu Glu Glu Leu Met Lys Cys Gln Ile Ile
 450 455 460
 Tyr Pro Arg Gln Gln Leu Leu Thr Leu Arg Glu Leu Glu Met Ile Gly
 465 470 475 480
 Phe Ile Glu Asn Asn Val Ser Lys Leu Ser Leu Leu Leu Asn Asp Ile
 485 490 495
 Ser Arg Lys Ser Glu Gly Leu Ser Gly Arg Val Leu Arg Lys Leu Pro
 500 505 510
 Phe Leu Ala His Ala Leu Tyr Val Gln Ala Pro Thr Val Thr Ile Glu
 515 520 525
 Gly Phe Leu Gln Ala Leu Ser Leu Ala Val Asp Lys Gln Phe Glu Glu
 530 535 540
 Arg Lys Lys Leu Ala Ala Tyr Ile
 545 550

<210> 9
 <211> 295
 <212> PRT
 <213> Artificial

<220>
 <223> Putative Protein Derived from cDNA.

<400> 9
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 Gly Trp Glu Gln Leu Ala Pro Gly Arg Thr Leu Ala Ala Thr Ala Pro
 20 25 30
 Trp Pro Trp Leu Ala Ala Arg Ala Arg Cys Ala Glu Val Ala Glu Leu
 35 40 45
 Ala Gly Pro Arg Arg Lys Arg Gly Glu Ala Gly Pro Arg Gln Glu Val
 50 55 60
 Ala Leu Pro Gly Pro Ser Ala Ser Gly Ser Gly Gly Gly Ala Pro Arg
 65 70 75 80

Ala Ala Asp Ser Lys Leu Gly Arg Gly Pro Arg Ala Glu Ala Ala Ala
85 90 95

Val Ala Ala Thr Leu Gly Val Arg Trp Arg Arg Pro Arg Pro Gly Trp
100 105 110

Val Pro Thr Ala Leu Gly Gly Ala Met Asp Glu Ala Val Gly Asp Leu
115 120 125

Lys Gln Ala Leu Pro Cys Val Ala Glu Ser Pro Thr Val His Val Glu
130 135 140

Val His Gln Arg Gly Ser Ser Thr Ala Lys Lys Glu Asp Ile Asn Leu
145 150 155 160

Ser Val Arg Lys Leu Leu Asn Arg His Asn Ile Val Phe Gly Asp Tyr
165 170 175

Thr Trp Thr Glu Phe Asp Glu Pro Phe Leu Thr Arg Asn Val Gln Ser
180 185 190

Val Ser Ile Ile Asp Thr Glu Leu Lys Val Lys Asp Ser Gln Pro Ile
195 200 205

Asp Leu Ser Ala Cys Thr Val Ala Leu His Ile Phe Gln Leu Asn Glu
210 215 220

Asp Gly Pro Ser Ser Glu Asn Leu Glu Glu Glu Thr Glu Asn Ile Ile
225 230 235 240

Ala Ala Asn His Trp Val Leu Pro Ala Ala Glu Phe His Gly Leu Trp
245 250 255

Asp Ser Leu Val Tyr Asp Val Glu Val Lys Ser His Leu Leu Asp Tyr
260 265 270

Val Met Thr Thr Leu Leu Phe Ser Asp Lys Asn Val Asn Ser Asn Leu
275 280 285

Ile Thr Pro Pro Pro Ser Pro
290 295

<210> 10
<211> 279
<212> PRT
<213> Artificial

<220>
<223> Putative Protein Derived from cDNA.

<400> 10
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Thr Trp Asn Arg Val Val Leu Leu His Gly Pro Pro Gly Thr Gly Lys
20 25 30

Thr Ser Leu Cys Lys Ala Leu Ala Gln Lys Leu Thr Ile Arg Leu Ser
 35 40 45
 Ser Arg Tyr Arg Tyr Gly Gln Leu Ile Glu Ile Asn Ser His Ser Leu
 50 55 60
 Phe Ser Lys Trp Phe Ser Glu Ser Gly Lys Leu Val Thr Lys Met Phe
 65 70 75 80
 Gln Lys Ile Gln Asp Leu Ile Asp Asp Lys Asp Ala Leu Val Phe Val
 85 90 95
 Leu Ile Asp Glu Val Glu Ser Leu Thr Ala Ala Arg Asn Ala Cys Arg
 100 105 110
 Ala Gly Thr Glu Pro Ser Asp Ala Ile Arg Val Val Asn Ala Val Leu
 115 120 125
 Thr Gln Ile Asp Gln Ile Lys Arg His Ser Asn Val Val Ile Leu Thr
 130 135 140
 Thr Ser Asn Ile Thr Glu Lys Ile Asp Val Ala Phe Val Asp Arg Ala
 145 150 155 160
 Asp Ile Lys Gln Tyr Ile Gly Pro Pro Ser Ala Ala Ala Ile Phe Lys
 165 170 175
 Ile Tyr Leu Ser Cys Leu Glu Glu Leu Met Lys Cys Gln Ile Ile Tyr
 180 185 190
 Pro Arg Gln Gln Leu Leu Thr Leu Arg Glu Leu Glu Met Ile Gly Phe
 195 200 205
 Ile Glu Asn Asn Val Ser Lys Leu Ser Leu Leu Leu Asn Asp Ile Ser
 210 215 220
 Arg Lys Ser Glu Gly Leu Ser Gly Arg Val Leu Arg Lys Leu Pro Phe
 225 230 235 240
 Leu Ala His Ala Leu Tyr Val Gln Ala Pro Thr Val Thr Ile Glu Gly
 245 250 255
 Phe Leu Gln Ala Leu Ser Leu Ala Val Asp Lys Gln Phe Glu Glu Arg
 260 265 270
 Lys Lys Leu Ala Ala Tyr Ile
 275

<210> 11
 <211> 431
 <212> PRT
 <213> Artificial

<220>
 <223> Putative Protein Derived from cDNA.

<400> 11
 Val Leu Leu Pro Gly Val Gly Gly Thr Gln Arg Arg Gly Gln Thr Phe

1	5	10	15
Thr Asp Pro Pro Tyr Val His Gly Gly Trp Ile Glu Val Ser Thr Ala	20	25	30
Lys Lys Glu Asp Ile Asn Leu Ser Val Arg Lys Leu Leu Asn Arg His	35	40	45
Asn Ile Val Phe Gly Asp Tyr Thr Trp Thr Glu Phe Asp Glu Pro Phe	50	55	60
Leu Thr Arg Asn Val Gln Ser Val Ser Ile Ile Asp Thr Glu Leu Lys	65	70	75
Val Lys Asp Ser Gln Pro Ile Asp Leu Ser Ala Cys Thr Val Ala Leu	85	90	95
His Ile Phe Gln Leu Asn Glu Asp Gly Pro Ser Ser Glu Asn Leu Glu	100	105	110
Glu Glu Thr Glu Asn Ile Ile Ala Ala Asn His Trp Val Leu Pro Ala	115	120	125
Ala Glu Phe His Gly Leu Trp Asp Ser Leu Val Tyr Asp Val Glu Val	130	135	140
Lys Ser His Leu Leu Asp Tyr Val Met Thr Thr Leu Leu Phe Ser Asp	145	150	155
Lys Asn Val Asn Ser Asn Leu Ile Thr Trp Asn Arg Val Val Leu Leu	165	170	175
His Gly Pro Pro Gly Thr Gly Lys Thr Ser Leu Cys Lys Ala Leu Ala	180	185	190
Gln Lys Leu Thr Ile Arg Leu Ser Ser Arg Tyr Arg Tyr Gly Gln Leu	195	200	205
Ile Glu Ile Asn Ser His Ser Leu Phe Ser Lys Trp Phe Ser Glu Ser	210	215	220
Gly Lys Leu Val Thr Lys Met Phe Gln Lys Ile Gln Asp Leu Ile Asp	225	230	235
Asp Lys Asp Ala Leu Val Phe Val Leu Ile Asp Glu Val Glu Ser Leu	245	250	255
Thr Ala Ala Arg Asn Ala Cys Arg Ala Gly Thr Glu Pro Ser Asp Ala	260	265	270
Ile Arg Val Val Asn Ala Val Leu Thr Gln Ile Asp Gln Ile Lys Arg	275	280	285
His Ser Asn Val Val Ile Leu Thr Thr Ser Asn Ile Thr Glu Lys Ile	290	295	300
Asp Val Ala Phe Val Asp Arg Ala Asp Ile Lys Gln Tyr Ile Gly Pro	305	310	315
			320

Pro Ser Ala Ala Ala Ile Phe Lys Ile Tyr Leu Ser Cys Leu Glu Glu
325 330 335

Leu Met Lys Cys Gln Ile Ile Tyr Pro Arg Gln Gln Leu Leu Thr Leu
340 345 350

Arg Glu Leu Glu Met Ile Gly Phe Ile Glu Asn Asn Val Ser Lys Leu
355 360 365

Ser Leu Leu Leu Asn Asp Ile Ser Arg Lys Ser Glu Gly Leu Ser Gly
370 375 380

Arg Val Leu Arg Lys Leu Pro Phe Leu Ala His Ala Leu Tyr Val Gln
385 390 395 400

Ala Pro Thr Val Thr Ile Glu Gly Phe Leu Gln Ala Leu Ser Leu Ala
405 410 415

Val Asp Lys Gln Phe Glu Glu Arg Lys Lys Leu Ala Ala Tyr Ile
420 425 430